ABSTRACT

Disclosed is a copper alloy. The copper alloy consists essentially of Cu : 69 to 88 mass%, Si : 2 to 5 mass%, Zr : 0.0005 to 0.04 mass%, P : 0.01 to 0.25 mass%, and Zn : balance; has relation of, in terms of a content of an element a, [a] mass%, f0 = [Cu] - 3.5[Si] - 3[P] = 61 to 71, f1 = [P]/[Zr] = 0.7 to 200, f2 = [Si]/[Zr] = 75 to 5000, and f3 = [Si]/[P] = 12 to 240; has a metal structure that contains α phase and, K phase and/or γ phase, and has relation of, in terms of a content of a phase b, [b]%, in an area rate, f4 = [α] + [γ] + [K] $\geq$ 85 and f5 = [γ] + [K] + 0.3[μ] - [β] = 5 to 95; and has an average grain diameter of 200 μm or less in a macrostructure when melted and solidified.